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3	US 20040131125 A1	20040708	103	Enhanced wireless packet data communication system, method, and apparatus applicable to both wide area networks and local area networks	Sanderford, H. Britton JR. et al.
4	US 20040091058 A1	20040513	15	QAM receiver and method for constellations having at least sixteen symbols	Tosato, Filippo et al.
5	US 20040013189 A1	20040122	25	Soft slicer in a hybrid decision feedback equalizer	Jayaraman, Srikant et al.
6	US 20030142759 A1	20030731	22	Transmission system for reduction of amateur radio interference	Anderson, Carl William et al.
7	US 20030128768 A1	20030710	17	System, decoder and method for transmitting, receiving and decoding high-speed digital data signals with reduced electromagnetic emissions	Harres, Daniel N.
8	US 20030058967 A1	20030327	32	Phase detectors in carrier recovery for offset QAM and VSB	Lin, Thuji S. et al.
9	US 20030058955 A1	20030327	22	High-speed communications transceiver	Raghavan, Sreen
10	US 6952458 B1	20051004	14	Demapping system and method	Djokovich; Igor et al.
11	US 6904098 B1	20050607	22	Linear phase robust carrier recovery for QAM modems	Isaksen; David Bruce et al.
12	US 6757334 B1	20040629	72	Bit rate agile third-generation wireless CDMA, GSM, TDMA and OFDM system	Feher; Kamilo
13	US 6665348 B1	20031216	76	System and method for interoperable multiple-standard modulation and code selectable Feher's GMSK, enhanced GSM, CSMA, TDMA, OFDM, and third-generation CDMA, W-CDMA and B-CDMA	Feher; Kamilo

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15	US 6633614 B1	20031014	32	Multicarrier personal access communication system	Barton; Melbourne et al.
16	US 6470055 B1	20021022	71	Spectrally efficient FQPSK, FGMSK, and FQAM for enhanced performance CDMA, TDMA, GSM, OFDM, and other systems	Feher; Kamilo
17	US 6449246 B1	20020910	35	Multicarrier personal access communication system	Barton; Melbourne et al.
18	US 6430228 B1	20020806	14	Digital QAM modulator using post filtering carrier recombination	Zhang; Qin
19	US 6313885 B1	20011106	29	DTV receiver with baseband equalization filters for QAM signal and for VSB signal which employ common elements	Patel; Chandrakant B. et al.
20	US 6259743 B1	20010710	26	Automatic constellation phase recovery in blind start-up of a dual mode CAP-QAM receiver	Garth; Lee McCandless
21	US 6141387 A	20001031	17	Digital QAM modulator using post filtering carrier recombination	Zhang; Qin
22	US 6137829 A	20001024	14	System and method for transmitting special marker symbols	Betts; William L.
23	US 6104442 A	20000815	29	Radio receiver for receiving both VSB and QAM digital HDTV signals	Patel; Chandrakant Bhailalbhair et al.
24	US 6026120 A	20000215	26	System and method for using circular constellations with uncoded modulation	Betts; William L.
25	US 5966376 A	19991012	41	Apparatus and method for digital data transmission using orthogonal cyclic codes	Rakib; Selim Shlomo et al.
26	US 5878088 A	19990302	19	Digital variable symbol timing recovery system for QAM	Knutson; Paul Gothard et al.
27	US 5859877 A	19990112	22	Simultaneous analog and digital communication using fractional rate encoding	Betts; William Lewis et al.
28	US 5844944 A	19981201	24	Simultaneous analog and digital communication using partitioning of bits into words	Betts; William Lewis et al.
29	US 5818653 A	19981006	30	Multiple-values digital signal magnetic recording and reproducing apparatus using a QAM and PSK modulator, pilot signal and a viterbi decoder	Park; Sam-yong et al.
30	US 5809062 A	19980915	10	Ambiguity resolution system in direct sequence spread spectrum modulation systems	Hulbert; Anthony Peter

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31	US 5805583 A	19980908	45	Process for communicating multiple channels of digital data in distributed systems using synchronous code division multiple access	Rakib; Selim Shlomo
32	US 5751774 A	19980512	25	Transmission system for digital audio broadcasting	Wang; Jin-Der
33	US 5684834 A	19971104	22	Simultaneous analog and digital communication using fractional rate encoding	Betts; William Lewis et al.
34	US 5608755 A	19970304	36	Method and apparatus for implementing carrierless amplitude/phase encoding in a network	Rakib; Selim
35	US 5588022 A	19961224	10	Method and apparatus for AM compatible digital broadcasting	Dapper; Mark J. et al.
36	US 5537441 A	19960716	21	Controlled simultaneous analog and digital communication	Bremer; Gordon et al.
37	US 5537436 A	19960716	30	Simultaneous analog and digital communication applications	Bottoms; Stanley et al.
38	US 5535245 A	19960709	22	Modulation/demodulation circuit for a digital signal recorder/reproducer	Kim; Soon T.
39	US 5506636 A	19960409	33	HDTV signal receiver with imaginary-sample-presence detector for QAM/VSF mode selection	Patel; Chandrakant B. et al.
40	US 5495203 A	19960227	20	Efficient QAM equalizer/demodulator with non-integer sampling	Harp; Jeffrey C. et al.
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42	US 5448555 A	19950905	29	Simultaneous analog and digital communication	Bremer; Gordon et al.
43	US 5440585 A	19950808	28	Applications of simultaneous analog and digital communication	Partridge, III; B. Waring
44	US 5287351 A	19940215	21	Method and apparatus for minimizing error propagation in correlative digital and communication system	Wall, Jr.; William E.
45	US 5222144 A	19930622	14	Digital quadrature radio receiver with two-step processing	Whikehart; J. William
46	US 5128964 A	19920707	12	Modulation method and apparatus for multicarrier data transmission	Mallory; Mark P.
47	US 5005186 A	19910402	44	Digital demodulator apparatus	Aono; Yoshihito et al.

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48	US 4961206 A	19901002	31	Data modem system	Tomlinson; Martin et al.
49	US 4924492 A	19900508	21	Method and apparatus for wideband transmission of digital signals between, for example, a telephone central office and customer premises	Gitlin; Richard D. et al.
50	US 4901333 A	19900213	18	Data transmission systems	Hodgkiss; William
51	US 4893316 A	19900109	63	Digital radio frequency receiver	Janc; Robert V. et al.
52	US 4849703 A	19890718	16	Method and apparatus for generating a data sampling clock locked to a baud clock contained in a data signal	Easley; Matthew F. et al.
53	US 4808937 A	19890228	15	Phase-locked loop for a modem	Correa; German E. et al.
54	US 4780884 A	19881025	10	Suppressed double-sideband communication system	Karabinis; Peter D.
55	US 4646326 A	19870224	9	QAM modulator circuit	Backof, Jr.; Charles A. et al.
56	US 4521878 A	19850604	16	Data transmitting-receiving system	Toyonaga; Noriyasu
57	US 4489418 A	19841218	13	Differential encoding technique	Mazo; James E.
58	US 4024342 A	19770517	15	System for detecting digital data transmitted by modulating a carrier	Croisier; Alain et al.
59	US 3988539 A	19761026	17	Data transmission system using optimal eight-vector signaling scheme	Motley; David M. et al.
60	US 3978407 A	19760831	15	Fast start-up adaptive equalizer communication system using two data transmission rates	Forney, Jr.; George D. et al.
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